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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------------------|---------------|----------------------|-------------------------|------------------|
| 09/756,688 | 01/09/2001 | Richard L. Fisher | Fisher-001221 4670 | |
| 75 | 90 12/22/2004 | | EXAMINER | |
| Albert W. Watkins | | | AVILA, STEPHEN P | |
| Quill & Disc Incorporated 30844 NE 1st Avenue | | | ART UNIT | PAPER NUMBER |
| St. Joseph, MN 56374 | | | 3617 | |
| | | | DATE MAILED: 12/22/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--|--|--|
| Office Action Summany | 09/756,688 | FISHER, RICHARD L. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Stephen Avila | 3617 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 26 Ag | oril 2004. | | | | |
| 2a) ☐ This action is FINAL . 2b) ☒ This | action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is | | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 53 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4)⊠ Claim(s) <u>21-31 and 38-72</u> is/are pending in the | | | | | |
| 4a) Of the above claim(s) is/are withdraw | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>21-23,25,26,28,29,31,38 and 40-72</u> is/are rejected. | | | | | |
| 7) Claim(s) <u>24,27,30,39</u> is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examine | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the o | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | |
| Replacement drawing sheet(s) including the correcti | on is required if the drawing(s) is obj | ected to. See 37 CFR 1.121(d). | | | |
| 11) ☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau | s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)). | on No ed in this National Stage | | | |
| * See the attached detailed Office action for a list of | of the certified copies not receive | d. | | | |
| Attachment(s) | . □ | (070,40) | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) 🔟 Interview Summary Paper No(s)/Mail Da | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | | atent Application (PTO-152) | | | |

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1. In view of the Appeal filed on March 26, 2004, PROSECUTION IS HEREBY REOPENED. A new ground of rejection of claims 21-23, 25, 26, 28, 29, and 31 is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
 - (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The following is a quotation of the appropriate paragraphs of 35 U S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

- 3. Claims 21-23, 25, 26, 28, 29, 31, 40-52, and 63-71 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lovell. Lovell discloses a drive assembly with an elongate drive tube 22, configured for rotatably receiving a drive shaft 16 therethrough, a drive assembly housing 24 having a lower end, a bearing 40 in rotational communication between the drive assembly housing and the drive shaft, a Seal 75 configured to restrict contaminants from entering the drive assembly housing, and a seal cap 62 with threads (at 64; note Figure 4, for example). Additionally, with respect to "for a drive marine mud motor", it is noted that this is intended use and intended use does not define patentable structure. Furthermore, the device of Lovell is capable of being used in a mud environment and thus is a mud motor.
- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made
- 5. Claims 53-62 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lovell in view of Hulsebus et al (cited by Applicant). Lovell does not disclose ball bearings. Hulsebus et al teach anti-friction ball bearings 15, 34 to increase the durability and life of the parts to avoid fracture (note column 1, lines 12-17). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the sleeve bearing of Lovell to be in form of ball bearings for increased

durability and life of the parts to avoid fracture and for reduced friction as taught by Hulsebus et al.

- 6. Claim 38 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Foreman (6,361,388). Foreman discloses a drive assembly for a marine motor with an elongate tube 16, a drive shaft 27, a housing 42, a bearing 40, and seals 32, 34 with the inside of the drive assembly housing is coupled to the outside of the elongate drive tube.
- 7. Claims 24, 27, 30 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. Applicant's arguments filed March 26, 2004 have been fully considered but they are not persuasive. With respect to the rejection of 35, USC 102(e) based upon the Foreman reference, the evidence filed by Applicant including a newspaper article and affidavits do not specifically detail the inside of the drive assembly housing coupled to the outside of the elongate drive tube.

Applicant alleges that Lovell does not disclose a bearing. However, Lovell clearly discloses a bearing, note in particular, column 4, line 47, "inner bearing housing 30", column 4, line 48, "bearing insert 40", column 6, line 17, "bearing 40", column 6, line 22, "bearing 40 in the bearing assembly 10".

Applicant further alleges that Lovell does not disclose an elongate shaft and removable bearing housing. However, Lovell clearly discloses an elongate shaft 16 and

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a removable bearing housing 30 (note column 6, lines 1-20, which detail the removal of the bearing housing in order to replace the bearings).

Applicant further alleges that the device of Lovell is unsuitable for application with mud motors. However, it is not seen where the Lovell patent sets forth specifically that it is unsuitable for mud motors. Note that the Lovell patent could operate in muddy water and is capable of being used as a mud motor.

Applicant further alleges that the bearings of Lovell are not removable. However, as stated above column 6, lines 1-20 clearly disclose the bearings are replaceable via a removable housing 30. Additionally, housing 24 is clearly removable via threaded connection to tube 22. (note Figure 4, for example).

Applicant does not directly argue the combination of the ball bearings of Hulsebus et al with Lovell, as set forth in paragraph 5 above, so that combination is deemed to be proper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Avila whose telephone number is 703-308-2578. The examiner can normally be reached on Monday to Thursday from 8 AM to 4 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen Avila
Primary Examiner
Art Unit 3617

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